

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A process for recovering 3-aminomethyl-3,5,5-trimethylcyclohexylamine (isophoronediamine, IPDA) having a fractionally distilled cis/tran isomer ratio of at least 73/27, which comprises the following steps:

- a. providing IPDA in a cis/tran isomer ratio of $< 73/27$; and
- b. feeding IPDA into the middle region of a distillation column having internals and distilling the IPDA in this distillation column at a temperature of from 5 to 300°C and a pressure of from 10 to 2000 mbar; and
- c. optionally further distilling the IPDA obtained by step b) in at least one further column, and thus further purifying the IPDA;

where steps b) and optionally c) separate the IPDA used in step a) into at least five fractions ia) to iv):

- ia) ~~the organic~~ an organic proportion of a fraction of impurities having lower boiling points than trans-IPDA,
- ib) ~~the aqueous~~ an aqueous proportion of a fraction of impurities having lower boiling points than trans-IPDA,
- ii) a fraction of impurities having higher boiling points than cis-IPDA,
- iii) an IPDA fraction having a cis/trans isomer ratio of $\geq 73/27$ and
- iv) a depleted IPDA fraction having a cis/trans isomer ratio of $\leq 66/34$.

2. (Previously Presented) A process as claimed in claim 1, wherein the proportion of cis- and trans-IPDA in the fraction ib) obtained by steps b) and c) is $\leq 2\%$ weight, based on the total weight of fraction ib).

3. (Previously Presented) A process as claimed in claim 1, wherein IPDA is used in step a) which has a cis/trans isomer ratio of $< 70/30$.

4. (Previously presented) A process as claimed in claim 1, wherein the distillation column used in step b) has a separating performance of at least 20 theoretical plates.
5. (Currently Amended) A process as claimed in claim 1, wherein at least said distillation column or ~~said at~~ said at least one further column is a dividing wall column.
6. (Previously Presented) A process as claimed claim 1, wherein said distillation column and said at least one further column are used, of which one is a dividing wall column.
7. (Currently Amended) A process as claimed in claim 1, wherein said distillation ~~column or column~~ column and one further column are used and one of the fractions iii) or iv) is removed at a sidestream takeoff.
8. (Currently Amended) A process as claimed in claim 1, wherein said at least one further column is two further columns and said distillation column and said two further columns are connected to one another, ~~the distillation column and the two further columns.~~
9. (Previously Presented) A process as claimed in claim 1, wherein the internals in the distillation column or the at least one further column used in steps b) and/or c) are selected from the group consisting of random packings, sheet metal structured packings and woven metal structured packings.
10. (Previously Presented) A process as claimed in claim 2, wherein IPDA is used in step a) which has a cis/trans isomer ratio of $< 70/30$.
11. (Previously Presented) A process as claimed in claim 1, wherein said IPDA is used in step iii) which has a cis/trans isomer ratio of 73/27 to 75/25.
12. (Previously Presented) A process as claimed in claim 10, wherein said IPDA is used in step iii) which has a cis/trans isomer ratio of 73/27 to 75/25.

13. (Previously Presented) A process as claimed in claim 1, wherein said depleted IPDA is used in step iv) which has a cis/trans isomer ratio of $\leq 66/34$.
14. (Previously Presented) A process as claimed in claim 12, wherein said depleted IPDA is used in step iv) which has a cis/trans isomer ratio of $\leq 66/34$.
15. (Previously Presented) A process as claimed in claim 14, wherein the distillation column used in step b) has a separating performance of at least 20 theoretical plates.
16. (Currently Amended) A process as claimed in claim 15, wherein at least said distillation column or ~~said~~ said at least one further column is a dividing wall column.
17. (Currently Amended) A process as claimed ~~claim 16~~ claim 15, wherein said distillation column and said at least one further column are used, of which one is a dividing wall column.
18. (Currently Amended) A process as claimed in ~~claim 17~~ claim 15, wherein said distillation column or one further column are used and one of the fractions iii) or iv) is removed at a sidestream takeoff.